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ABSTRACT

Despite the fact that money is important in everyday life, there is a dearth of empirical material and research concerning the meaning of money and people's attitudes towards money in the psychological literature. This study examined the underlying concepts or beliefs people hold about money and the extent to which different needs can be fulfilled by money. Subjects (N=689) were adults in a variety of occupations who responded to a 25-page questionnaire measuring attitudes towards money as well as other variables, including the Money Ethic Scale. The results of a principal components factor analysis identified six clearly interpretable factors: achievement and obsession, good, power, expression, evil, and management of money. Results showed that males tended to have stronger positive attitudes toward money than did females. The overall value of money was associated with theoretical, economic, and political values and was negatively associated with aesthetic, social, and religious values. People's perception of money as a symbol of achievement and obsession was associated with many aspects of dissatisfaction with the job and life. Compared with previous studies, results supported the validity of the Money Ethic Scale. However, it appears that people's attitudes toward money may be influenced by sex, economic status, experiences, associates, employment situation, and many personality variables. (ABL)

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The Meaning of Money Revisited: The Development of the Money Ethic Scale

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Abstract

A total of 689 subjects responded to a questionnaire which measured attitudes towards money as well as other variables. The results of a principal components factor analysis identified six clearly interpretable factors: Achievement and Obsession, Good, Power, Expression, Evil, and Management of Money. The total amount of variance explained by these six factors was 39.7%. This 27-item Money Ethic Scale (MES) has a coefficient alpha of .81 and a test-retest reliability (with four weeks apart) of .91. The MES scale as related to demographic variables, personality variable, job satisfaction, life satisfaction, and strain were also examined. Several occupational differences were also found. The results were discussed in terms of people's attitudes towards money as a dispositional variable.

The Meaning of Money Revisited: The Development of the Money Ethic Scale

Money is an important factor in almost everyone's life (Wernimont & Fitzpatrick, 1972). Since Frederick Taylor, there is a widespread interest in money as a motivational tool for spurring production (Opsahl & Dunnett, 1966; Whyte, 1955). It has been suggested in the literature that money isn't everything and its meaning is "in the eye of the beholder" (McClelland, 1967, p. 10). Despite the fact that money is important in everyday life, there is a dearth of empirical material and research concerning the meaning of money and people's attitudes towards money in the psychological literature (cf. Furnham, 1984; Rubenstein, 1981; Yamauchi & Templer, 1982). It has been suggested by Furnham (1984) that the paucity of psychological research on money is probably caused by the following reasons: a lack of rapproachment between psychology and economics (Simon, 1963, van Raaij, 1981), a lack of standardized instruments for assessment (Yamanchi & Templer, 1982), and a taboo associated with money (Goldberg & Lewis, 1978; Rubenstein, 1981).

In a recent article, Ropp (1987) stated that "the two most significant functions growing now in importance to companies are the compensation and the organization development functions" (p. 39). It appears that controlling the costs of human resources and designing a corporate culture that will tie pay closer to performance are two of the major concerns in human resources management today (cf. Cascio, 1982; Milkovich & Newman, 1987; Lawler, 1971, 1973, 1981; 1986; Whyte, 1955).

To some, money, is a motivator, others disagree (cf. Herzberg, Mausner, & Snyderman, 1959; McClelland, 1967; Whyte, 1955). Most people agree that money

is important. Rubenstein (1981) examined people's attitudes towards money in a nationwide poll and found that 14 percent of the people in the study ranked "money" above all else when they were asked to rank six all-important topics--politics, sex, money, family, work, and food. Sixty-two percent of them ranked money among the top three. The underling notions concerning the importance of money appear to be that "money satisfies all types of needs" (Strauss & Sayles, 1980; p. 6), "money has been and continues to be the primary means of rewarding and modifying human behavior in industry" (Opsahl & Dunnett, 1966, p. 94), "[m]oney is an important factor in the lives of all of us" (Wernimont & Fitzpatrick, 1972, p. 218), and money is probably "the most important thing in the world" (Shaw, 1905, p. iv).

The major purpose of the present research was to study the underlying concepts or beliefs people hold about "money" and examine the extent to which different needs can be fulfilled by money. The work described in this paper viewed people's attitudes toward money as a dispositional variable. First, the initial effort was directed toward the development of an internally consistent measure of attitudes towards money: The Money Ethic Scale (MES). Second, attempts were made to characterize its psychological meaning in terms of its relationships with demographic variables, personality variables, job satisfaction, life satisfaction, and strain. Some related literature will be reviewed briefly as follows:

Wernimont and Fitzpatrick (1972) examined the meaning of money and found seven major dimensions: shameful failure, social acceptability, pooh-pooh attitude, moral evil, comfortable security, social unacceptability, and conservative business values. They suggested that values about money may have been influential in leading individuals to join particular groups and the

present values concerning money can be formed or developed after joining the group in some instances. It was also concluded that there is no support for the notion that money is more "valued" by poor groups than by rich ones (cf. Bruner & Goodman, 1974).

In a large survey involving more than 20,000 people, Rubenstein (1981) revealed that how people feel about money depends on how they feel about themselves and the rest of their lives. Income is used to judge success and money also represents financial security. A very large percentage of the respondents (74%) agree with the statement that "In America, money is how we keep score" (p. 36). Sixty-one percent of the people believe that income is very or moderately revealing of success.

Further, those who want things that they can't have are the ones who tend to be low in self-esteem. In fact, the frustration of material aspirations is the most important factor in feeling money troubled. The survey also reveals that unhappiness with both work and home life is strongly related to money discontent. Many respondents in the survey revealed the desire to have more money. Moreover, those who are money troubled as adults are those whose upbringing emphasized "the importance of money" (p. 37).

Yamanchi and Templer (1982) developed a fully psychometrized Money Attitude Scale (MAS). Sixty-two items were generated based on their conceptualization of three psychological aspects of money: security, retention, and power-prestige. Based on a factor analysis of their original items, five factors were identified. These factors were power-prestige, retention time, distrust, quality, and anxiety. Yamanchi and Templer (1982) stated that these attitudinal factors are independent of a person's income.

However, their study was overconcerned with psychopathological correlates of money (cf. Furnham, 1984).

McClure (1984) developed a 22-item money scale and examined the relationship between money attitudes and neurotic trends. He found that money problems are just a subset of living problems typical of people who are anxious, neurotic and introverted. Further, problem money attitudes were strongly associated with the general pathological attitudes, but not to each other. McClure (1984) suggested that demographic variables such as sex, age, race, occupation, and other variables do not seem related to the money attitudes. Therefore, it is implied that money attitudes were generally similar in different groups in our culture. McClure's (1984) study was again concerned with psychopathological issues.

Furnham (1984) investigated the relationship between various demographic and social belief variables, and people's attitudes to, and habits of, money usage in Britain. The 60-item inventory was generated based on three sources: the Money Attitude Scale (MAS) (Yamanchi & Templer, 1982), items from the psychology of money (Goldberg & Lewis, 1979), and the Midas Scale (Rubinstein, 1980). Based on the factor-analytic results, six factors emerged: obsession, power/spending, retention, security/conservative, inadequate, and effort/ability. The factors identified in Furnham's study wee similar to those factors found in Yamanchi and Templer's (1982) study such as power, retention, and inadequacy in a sample of people in the U.S.

Furnham (1984) found that low income people were more obsessed by money and more likely to use money for power. Further, higher income individuals believed that the ability to earn money was due to their effort and ability. Males were more obsessed with money than females, whereas females were more

conservative and security-conscious than males. Less well educated people also tended to be more obsessed with money. Moreover, attitudes towards money was also related to the endorsement of the Protestant work ethic in that high work ethic subjects were more obsessed by money, more retentive, more security-minded and believed wealth to be due to effort and ability more than low work ethic subjects.

Crump (1981) stated that money "always represents or signifies something other than itself (p. 16). Further, he suggested that "one is not interested in money, but in what money will buy" (p. 16). Therefore, money is a symbol signifying what it can be converted into. One of the most pervasive notions in the areas of work motivation has been the concept of human needs (Steers & Porter, 1987).

Several need theories, or content theories, can be identified in the work motivation literature (Campbell, Dunnett, Lawler, & Weick, 1970; Campbell & Pritchard, 1976; Steers & Porter, 1987). For example, people's physiological needs, safety needs, belongingness, esteem needs, and self-actualization needs can be arranged in a hierarchy (Maslow, 1954). These needs can be grouped into two levels (e.g., Herzberg et al., 1959) or three levels (Alderfer, 1969). Finally, Atkinson (1964) and McClelland (1951) further refined and investigated a subset of motives from Murray's (1938) list. The three which have received the most attention are the need for achievement, the need for affiliation and the need for power. A detailed discussion of these theories is beyond the scope of this paper (see Campbell & Pritchard, 1976; Steers & Porter, 1987, for a review). The meaning of money as related to different human needs was also examined in the present study.

Method

Subjects

A 25-page questionnaire was distributed to people in the middle Tennessee area. Subjects were recruited from the students with part-time or full-time work experience and faculty of a regional state university with 13,000 students, personnel managers attending professional compensation seminars, workers at Arnold Engineering Development Center, local schools, banks, churches, and other establishments. This sample can not be taken as representative of the U.S. population and it may be unwise to generalize these results to the entire population. However, there is no reason to believe that they are atypical. Of the 1,200 copies of the questionnaire, 769 copies were returned. A total of 689 usable questionnaires were retained for subsequent analyses.

Five hundred and three subjects indicated their occupation on the questionnaire. Based on the information of this item, subjects were classified as social service worker (n = 6), minister/people work in religious and church organization (n = 16), school teacher (n = 22), information/communication/librarian (n = 7), supervisor (n = 22), personnel manager (n = 33), engineer (n = 33), student/student worker (n = 56), food service/restaurant worker (n = 37), secretary/clerk (n = 44), cashier/sales clerk (n = 32), computer programmer/operator (n = 8), homemaker (n = 7), sales (n = 22), health care worker (n = 13), technician (n = 19), accountant/bookkeeper/bank teller (n = 17), manager/owner (n = 39), college professor (n = 11), military/police/fire fighter/security (n = 14), production

worker (n = 33), miscellaneous (lawyer, n = 2; writer/editor, n = 3; farmer, n = 3; woodworker, n = 2; hair stylist, n = 2), and other (n = 186).

In this sample, 321 were male and 368 were female. The average age of the subjects was 28.14 years. The majority of the subjects (n = 619, 89.8%) were white and only 70 subjects (10.2%) were members of different minority groups. Of these subjects, 558 had some college and 128 had some training at the graduate school level. Further, 249 individuals worked full-time and 170 worked part-time. However, only 376 respondents reported their income on the questionnaire. Of these, 48 people (13%) had an income over 30,000, 207 individuals (55%) had an income less than 15,000, and 121 subjects (32%) had an income between 15,000 and 30,000.

In terms of political affiliation, 160 were Republicans and 160 were Democrats, and 231 were independent. Finally, in terms of marital status, the number of people who were single, married, divorced, and widowed were 244, 283, 28, and 7, respectively.

Measures

The Money Ethic Scale. Fifty items were generated to reflect (1) the extent to which money could satisfy different needs of individuals and (2) people's attitudes towards money based on ideas from relevant literature (e.g., Furnham, 1984; Goldberg & Lewis, 1978; Maslow, 1954; Rubenstein, 1981; Yamanchi & Templer, 1982). The response format was a 7-point, Likert-type scale using disagree strongly (1), neutral (4), and agree strongly (7) as anchor points. The same format has been adopted for all the measurements in the present study except mentioned otherwise.

The Protestant Work Ethic. The traditional Weberian concept of the Protestant Ethic which embraces the virtues of industriousness, ambition, and

the ascetic life and condemns laxity and laxiness, as measured by the Mirels and Garrett's (1971) scale was employed. This 19-item inventory was selected for the present study due to its use in some relevant research in recent literature (e.g., Furnham, 1982, 1984; Tang & Baumeister, 1984).

For ease in scoring, the responses of this scale are converted to a 7-point scale with total scores range from 19 to 133. This scale shows good internal consistency (Cronbach alpha = .79) and relational fertility. Further, a significant negative correlation was obtained in relation to Rotter's Internal-External Scale (r = .30, p < .01) (Mirels & Garrett, 1971).

The Leisure Ethic. The 10-item Leisure Ethic Scale developed by Crandall and Slivken (1978, 1980) has several distinguishing features. First, references to work are not included in the items. Second, this scale has test-retest reliabilities of .82, .59, .87, and .85 from one to five weeks and has a reliability alpha of .76. This scale correlates significantly with other scales such as Burdge's (1961) Leisure Ethic Scale (r = .54), the Neulinger's (1974) affinity for leisure subscale (r = .50), and with satisfaction with leisure (r = .55). Crandall and Slivken (1978) also found, in a study using the longer from, that business students were one complete standard deviation below the leisure studies students on the Leisure Ethic Scale--the leisure majors always answering in the more pro-leisure direction. Further, this scale is a significant predictor of wilderness use and intentions of future wilderness use.

Type A Personality. A short measure of Type A personality (Sales, 1969; Vickers, 1975) was adopted for the present study. Each item of this 9-item scale is presented in the form of a 7-point, Likert-type scale ranging from "not at all true of me" (1) to "very true of me" (7). This Type A scale

correlated significantly with the Jenkins Activity Survey (r = .80) and was strongly associated with the presence of a number of coronary risk factors (French & Caplan, 1969). This measure has an internal consistency (alpha) of .80 and has a high correlation with the longer scale, r = .90 (Vickers, 1975). It has a test-retest reliability (with four weeks apart) of .87 (Tang, 1988).

Internal and External Locus of Control. Rotter's (1966) internal and external locus of control scale, a forced-choice scale, was also used in the present study. The scores range from zero (the consistent belief that individuals can influence the environment--that rewards come from internal forces) to 23 (the belief that all rewards come from external forces) (Rotter, 1971, p. 42). Rotter (1971) reported that the average score on the I-E scale is about 11.

The Marlowe-Crowne Social Desirability Scale. The Social Desirability Scale identifies those individuals who have a greater need for approval (Crowne & Marlowe, 1964). There is evidence that those with a high need for approval do give socially desirable responses. They conform more than do individuals with a low need for approval, they do not show overt hostility towasrd one who has insulted and double-crossed them, and they are less likely to speak "dirty" words.

Study of Values. This Study of Values aims to measure the relative prominence of six basic interest or motives in personality: the theoretical, economic, aesthetic, social, political, and religious (Allport, Vernon, & Lindzey, 1970). The mean reliability coefficient, using a z transformation, is .90. In this scale, respondents are asked to prioritize two or four alternatives to indicate their personal preferences.

Job Descriptive Index. The Job Descriptive Index (JDI) was developed by Smith, Kendall, and Hulin (1969, 1975). This scale measures people's job satisfaction in five different areas: work, pay, promotions, supervision, and co-workers. Respondents are asked to indicate "Yes", "?", or "No" to the items of JDI. Further, in order to make scores more comparable on the five scales, the scores on the Pay and Promotion scales are doubled.

Life Satisfaction. Flanagan (1978) examined 6,500 critical incidents concerning the quality of life and then sorted these incidents into 15 categories. These 15 quality-of-life components were listed under five headings: physical and material well-being, relations with other people, social, community, and civic activities, personal development and fulfillment, and recreation. These 15 items and an overall measure of satisfaction with life were adopted to measure life satisfaction.

Depression, Anxiety, and Irritation. Depression, anxiety, and irritation measures are related to a person's response to stress, i.e., strain (Caplan, Cobb, French, Harrison, & Pinneau, 1975). Thirteen items comprising three affect indices were selected. The Anxiety measure includes three items referring to the negative side of this feeling state and one referring to its absence. The measure of Depression was derived from a factor analysis of the Zung (1965) scale. The three negatively phrased items which tapped the dimension of Irritation were combined into a measure of the third affect.

Results

The data based on the 50-item questionnaire from 689 subjects were tabulated and subjected to a principal components factor analysis. Using a criterion of eigenvalues greater than one, followed by the varimax rotation, resulted in 12 factors which accounted for 54.0% of the common variance in the Money Ethic Scale. Further, a scree-test, advocated by Cattell (1965), was used. By using the scree-test, a researcher examines the graph of eigenvalues, and stops factoring at the point where the eigenvalues (or characteristic roots) begin to level off forming a straight line with an almost horizontal slope (Kim & Mueller, 1978). Based on this rule, only the first six factors which involved a total of 27 items were selected for the Money Ethic Scale (see Figure 1).

The total amount of variance explained by these six factors was 39.7%. This result was consistent with previous findings: Furnham (1984) identified six factors using the scree-test, which accounted for 35% of the total variance. Further, Yamauchi and Templer (1982) selected five substantive factors for the Money Attitude Scale (the scree test) which accounted for 33.6% of the variance. Items that had factor loading of .45 or greater on a factor were selected to represent that factor. Table 1 depicts the six factors of the Money Ethic Scale.

Insert Figure 1 and Table 1 about here

Factors of the Money Ethic Scale (MES)

An examination of Table 1 showed that the first and largest factor, involving 6 of the 50 items, accounted for 16.5% of the common variance. The first factor was named "Achievement and Obsession". The items of this factor associated with the idea that money represented an individual's achievement, security, success, autonomy and freedom. This was consistent with the notion that in the U.S.A., people use money as their score card. Further, money is a symbol of success. These items seemed to imply that people holding these beliefs were obsessed by all aspects of money and they always wanted to have more and more money. The second largest factor contained five items and accounted 6.7% of the variance. The items of this factor were related to the concept that money was attractive, good, important, and valuable. All these variables seemed to be related to the positive or favorable attitudes towards money. Thus, the second factor was labeled as "Good". It simply represented the theme that money is good.

The idea suggested by the four items of Factor three listed in Table 1 was best characterized as "Power". This factor accounted for 5.8% of the variance. These items were associated with the attitudes that money is a status symbol. Money is very powerful and can be used to influence other people. Factor four had four items and accounted for 4.3% of the common variance. Two of the four items of this factor dealt with social needs and self-esteem needs, whereas the other two items dealt with expressing one's competence and ability and having the opportunity to be what one wanted to be. These ideas were very similar to Maslow's self-actualization needs. Thus, Factor four was called "Expression".

There were four items for Factor five which accounted for 3.5% of the variance. The variables of this factor were related to the concept that money is evil, shameful, and useless. These attitudes were more or less the opposite of Factor two and seemed to degrade the value of money. These negative, unfavorable, pooh-pooh attitudes were called "Evil". The last factor had four variables and accounted for 3.0% of the variance. The items of this factor dealt with the way people handle and manage their money. It also illustrated the attitudes or ideas of individuals who are very careful with their money, i.e., "retention" of money (cf. Furnham, 1984, p. 503). Thus, the final factor was labeled as "Management of Money".

The means, standard deviations, and correlations of the six factors and the overall Money Ethic Scale are presented in Table 2. It should be pointed out that most of these correlations were positive and significant. Factor five-Evil was negatively correlated with Achievement and Obsession, Good, and Power. Evil was not associated with Expression and Management of Money.

Insert Table 2 and 3 about here

Reliability

The Cronback's coefficient alpha for the 27-item Money Ethic Scale was .81. Further, the coefficient alpha for each of the six factors of the MES scale was as follows: .77, .75, .68, .66, .68, and .68, respectively. Finally, 50 subjects in the present sample were given the same measures twice four weeks later. The test-retest reliability was .91. Thus, the MES scale

can be considered as having reasonable interitem consistency and test-retest reliability.

The Money Ethic Scale (MES) and Other Variables

Table 3 shows the Money Ethic Scale and its six factors as related to several demographic variables, personality variables, job satisfaction, life satisfaction, and stress. The mean, standard deviation, and correlations of these variables are also presented in Table 3.

Demographic Variables. The results of Table 3 show that age was positively correlated with their Management of Money and negatively correlated with the feeling that money is Evil. Male subjects tended to score higher on Achievement and Obsession, Good, Power, and the overall MES than female subjects. Subjects' weight and body weight were both associated with Achievement and Obsession and the overall MES. Body weight was also correlated with the feeling that money is Good. As years of education and income increased, people felt that money was less Evil. Further, high income people tended to score lower on the Expression and the overall MES than low income people.

Personality Variables. The endorsement of the Protestant Work Ethic was significantly correlated with Power, Expression, Evil, and the overall MES. The endorsement of the Leisure Ethic was significantly correlated with all six factors and the MES in that a highly playful person who enjoyed leisure tended to think money is associated with Achievement and Obsession, Good, Power, and Expression. Further, those who were playful did not think that money is Evil and did not manage their money very well, at least their attitudes towards the Mangement of Money.

Type A individuals tended to score high on Achievement and Obsession, Good, Power, Management of Money, and the overall MES than Type B individuals. People with external locus of control had the tendency to score high on Power, Expression, and the overall MES and to score low on the Management of Money. Further, those who had a high level of approval motive scored high on Evil and Management of Money and scored low on Achievement and Obsession, Good, Power, Expression, and overall MES.

The five different dimensions of the Study of Values were examined in the present study. Theoretical interests were significantly correlated with three factors (Achievement and Obsession, Good, and Power) and the overall MES. Economic values were significantly and positively associated with all the factors of the Money Ethic Scale and the total MES score and negatively associated with Evil. The aesthetic man sees his highest value in form and harmony. The aesthetic values were generally negatively associated with Achievement and Obsession, Good, Evil, Management of Money, and the overall MES. This was consistent with the notion that the aesthetic attitude is diametrically opposed to the theoretical attitude. The highest value for the social dimension is love of people. This value was again negatively correlated with Achievement and Obsession, Good, Expression and the overall MES and was positively correlated with the attitude that money is Evil. The political man is interested primarily in power. Thus, the political values represented the attitudes that emphasized personal power, influence, and renown. The political values were associated with the attitudes that money was a representation of Achievement and Obsession, Good, Power, Expression, and the overall MES and were negatively related to the idea that money was Evil. On the other hand, religious values were negatively correlated with

many factors of the MES except Management of Money. Further, religious attitudes were consistent with the attitudes that money was Evil.

Job Satisfaction (JDI). Satisfaction with work was negatively correlated with Achievement and Obsession, Expression, Evil, and the overall MES. However, Achievement and Obsession, Power, Expression, and overall MES were negatively associated with pay satisfaction. Management of Money was significantly associated with satisfaction with promotion and supervision. Satisfaction with supervision was also positively related to the attitude that money is Good and was negatively correlated with the value that money is Evil. Satisfaction with co-workers was negatively associated with Achievement and Obsession, Expression, Evil, and the overall MES score.

Life Satisfaction. The results of Table 3 showed that people's positive attitudes toward money, thinking money represents one's Achievement and Obsession, was negatively associated with different aspects of life satisfaction (e.g., relatives, helping othes, understanding self and life, expressing oneself in music, art, writing, and in leisure-time activities, socializing, and the overall life satisfaction). The attitude that money is Good was positively associated with satisfaction with spouse, socializing, passive leisure activities, and active recreation. The Power motive related to money was related to learning, attending school, improving understanding. However, it was related to the dissatisfaction in material goods, and the overall life.

The attitude that money represents Expression was positively correlated with satisfaction with government, and learning, improving one's understanding, or getting additional knowledge and was negatively associated with close friends, understanding oneself, and the overall life satisfaction.

Those who were satisfied with the relationship with close friends, and helping others thought that money is Evil. The Evil attitude was also related low satisfaction with health and spouse. A positive attitude toward the Management of Money was associated positively with most of the items of life satisfaction and overall life satisfaction. Finally, the overall MES was related with satisfaction with learning and active recreation and was negatively correlated with overall life satisfaction.

Strain. The overall MES was significantly associated with depression, anxiety, and irritation. Further, Achievement and Obsession, Good, Power, Expression, and Evil were also related to different aspects of strain. However, the attitude related to the Management of Money was negatively related to depression.

Occupational Differences

A total of 503 subjects were grouped into 22 occupations. Subjects' scores of the six factors and the total MES measure were examined using one-way analyses of variance (ANOVAs). The mean and sample size for each group on MES are presented in Table 4. The results of a one-way ANOVA on the total MES scale reached significance, F (21, 481) = 1.98, p = .006. Further multiple range test using Tukey-HSD procedure showed that production workers scored significantly higher on the MES scale (M = 127.39) than minister and people in religious organizations (M = 109.63) and school teacher (M = 111.14), $ps < .05$. One-way ANOVA on Achievement and Obsession was also significant, F (21, 481) = 2.23, p = .002. The results of the Tukey-HSD procedure further revealed that social service (M = 17.50) and minister/religious group (M = 20.44) scored significantly lower than did production workers (M = 28.55) and the miscellaneous group (M = 29.50), $ps <$

.05. Finally, the food service group tended to have stronger attitude concerning money is Evil (M = 12.32) than did school teachers (M = 8.09), F (21, 481) = 1.61, p = .043.

Insert Table 4 about here

Discussion

The results of the present study showed that based on factor analysis, the Money Ethic Scale has six separate factors related to people's attitudes towards money: Achievement and Obsession, Good, Power, Expression, Evil, and Management of Money. These factors are similar to the factors found in other previous studies, such as Obsession (Furnham, 1984), Social Acceptability (Wernimont & Fitzpatrick, 1972), Power (Furnham, 1984)/Power-Prestige (Yamauchi & Templer, 1982), Moral Evil (Wernimont & Fitzpatrick, 1972), and Effort/Ability (Furnham, 1984). These results support the notion that the attitudes towards money are by no means unidimensional and "money is a complex symbol imbued with meaning and symbolism" (Furnham, 1982, p. 509).

An examination of several demographic variables suggested that males tended to have stronger positive attitudes towards money (i.e., Achievement and Obsession, Good, Power, the overall MES) than did females. This is

consistent with the findings of Furnham (1984) in that males are more obsessed with money than females. Individuals who are older, highly educated, and have higher income tend to hold the attitude that money is less Evil than those who are younger, not highly educated and have lower income. Further, older people tend to think positively towards their Management of Money. Thus, it appears that people with different demographic backgrounds may hold different attitudes towards money.

Those individuals who have a high level of approval motive tend to view money in a negative direction and feel that money is Evil. However, they hold positive attitudes towards Management of Money. People with high work ethic and Type A personality, on the other hand, tend to view money in a more positive direction. Both high work ethic subjects and Type A subjects score high on Power, Management of Money and the total MES scale. Individuals with high leisure ethic and external locus of control also tend to have lower score on Management of Money than those with low leisure ethic and internal locus of control.

Further examination of the relationship between the Money Ethic Scale and Study of Values shows that the overall positive value towards money, as expressed by the MES scores, is associated with theoretical, economic, and political values and is negatively associated with aesthetic, social, and religious values. These results are consistent with people's common belief concerning money.

People's job satisfaction and life satisfaction were also examined in the present study. The results further confirm the notion that people's

perception of money as a symbol of Achievement and Obsession is associated with many aspects of dissatisfaction with the job and life (cf. Rubenstein, 1981). However, a positive attitude concerning the Management of Money may be associated with satisfaction with the job and life. This notion is further supported by the data in the areas of strain: depression, anxiety, and irritation (cf. McClure, 1984; Rubenstein, 1981).

The construct validity of a test is the extent to which the test may be said to measure a theoretical construct or trait (Anastasi, 1982). It derives from established interrelationships among behavioral measures (Cronbach & Meehl, 1955; Messick, 1975, 1980), or from a "nomological network" of associations and situations in which it acts (Guion, 1965, p. 129). Further, construct validation requires "the gradual accumulation of information from a variety of sources" (Anastasi, 1982, p. 144).

Based on the results of the present study, the correlations between the Money Ethic Scale and demographic variables, personality variables, different value systems, job satisfaction, life satisfaction, and strain have supported previous findings concerning the meaning of money and thus have provided tentative support for the construct validity of the measurement. Further research using different samples, different occupational groups, and other personality variables and related variables is definitely needed and encouraged.

Several occupational differences on the MES have been found. These results are in line with previous findings. For example, Wernimont and Fitzpatrick (1972) found that hard-core trainees and hospital sisters also "pooh pooh" the value of money. In the present sample, minister and people in religious organizations and school teachers also tend to value money less than

production workers. It is plausible that money is less important to certain groups of people in our society. It is also possible that values about money may have been influential in leading individuals to join particular groups as pointed out by Wernimont and Fitzpatrick (1972). However, caution should be made due to the small sample of subjects in each occupational group.

It appears that people's attitudes towards money may be influenced by sex, economic status, experiences, associates, employment situation, and many personality variables, or vice versa. Due to the correlational nature of the present study, no causal relationships can be drawn. However, people's attitudes towards money do associate with other types of values and attitudes, such as job satisfaction and life satisfaction. It should be pointed out that an individual's internal state can serve as an important stimulus for the interpretation of other information (cf. Tang & Baumeister, 1984). Using the language of job satisfaction for example, it is reasonable to believe that people may bring a positive or negative disposition to the work setting, process information about the job in a way that is consistent with this disposition, and then experience job satisfaction or dissatisfaction as a result (cf. Staw, Bell, & Clausen, 1986). That is, the meaning, that any event has, depends on the "frame" in which we perceive it. When we change the frame, we change the meaning. A positive or negative disposition can be recognized as one of the many frames that people use in their everyday life in evaluating information and daily events (e.g. job satisfaction).

Staw et al. (1986) stated that job attitudes have some "consistency over time" and "temporal stability" (p. 59). It was also pointed out that the National Longitudinal Survey data "showed significant consistency in job satisfaction when individuals changed both the employer for whom they worked

and their occupation" (p. 60). It is speculated that people's attitudes towards money, which have been acquired early in their lives, can be considered as one of those stable "dispositions".

Thus, people's attitudes towards money may be considered as a "frame" in which we perceive things and events. This is especially true in a material-oriented society in the U.S.A. Future research using longitudinal data will help us test this hypothesis and have a better understanding of our attitudes of money and other aspects of our life. More research is needed to determine the exact derivation of dispositions and the precise mechanisms by which dispositions can affect attitudes or behavior (cf. Staw et al., 1986). Further, cross-cultural differences should be examined also.

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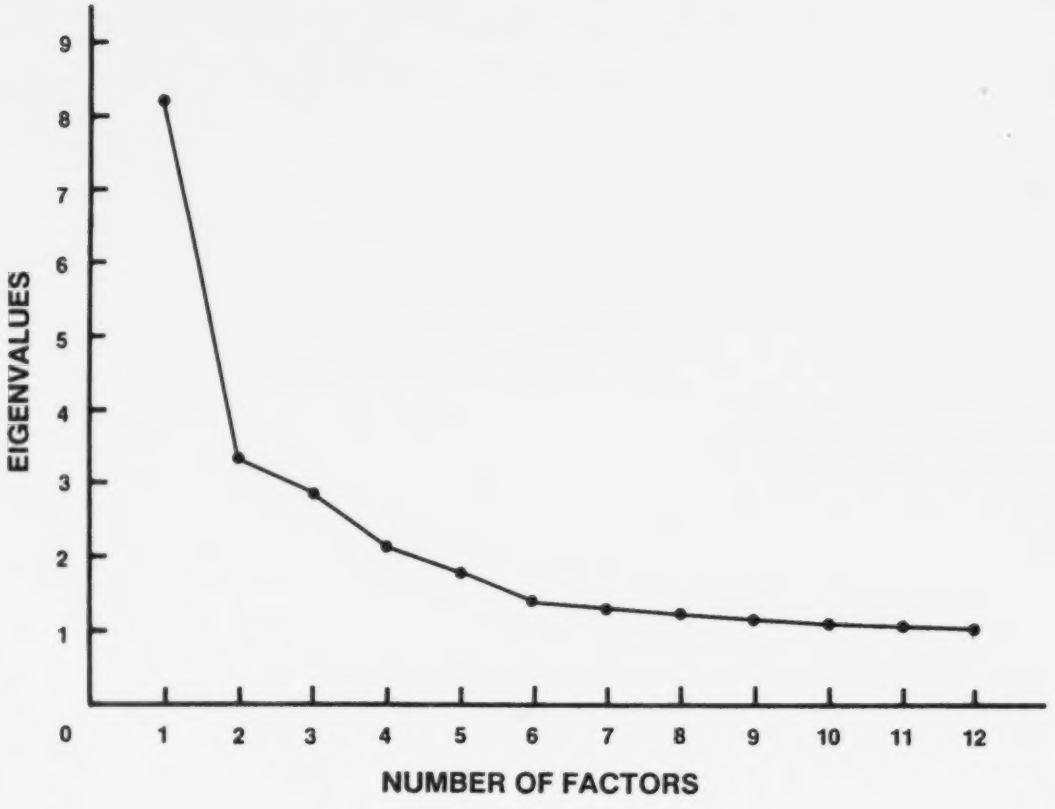
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NUMBER OF FACTORS

Figure Captions

Figure 1. Eigenvalues of the item correlations plotted against the number of factors for the Money Ethic Scale (MES).

Table 1

Factor Loadings for The Money Ethic Scale

Item	Factor Loadings I	II	III	IV	V	VI
Factor I: Achievement/Obsession						
1. Money represents one's achievement.	.72					
2. Money in the bank is a sign of security	.65					
3. Money is a symbol of success.	.64					
4. Money is the most important thing (goal) in my life.	.56					
5. Money gives you autonomy and freedom.	.50					
6. Money, the more you have, the better.	.48					
Factor II: Good						
7. Money is attractive.		.60				
8. I value money very highly.		.58				
9. Mongy is good.		.53				
10. Money is important.		.48				
11. Money is valuable.		.48				
Factor III: Power						
12. Money talks.			.62			
13. Money becomes a symbol of status in the modern society.			.61			

(Continues)

Table 1

Item	Factor Loadings I	II	III	IV	V	VI
14. Money can buy you luxuries.			.58			
15. Money means power.			.57			
Factor IV: Expression						
16. Money makes people respect you in your community.				.61		
17. Money can bring you many friends.				.61		
18. Money will help you to express your competence and ability.				.54		
19. Money can give you the opportunity to be what you want to be.				.48		
Factor V: Evil						
20. Money is the root of all evil.					.77	
21. Money is evil.					.73	
22. Money is shameful.					.63	
23. Money is useless.					.49	
Factor VI: Management of Money						
24. I use my money very carefully.						.80
25. I budget my money very well.						.80
26. I work very hard for money.						.53
27. I believe that "time is money".						.51

Table 2

Mean, Standard Deviation, and Correlation Coefficients of The Money Ethic Scale and Its Factors

Variable	M	SD	II	III	IV	V	VI	Money
1. Factor I (Achievement)	25.54	6.37	52***	44***	50***	-08*	17***	81***
2. Factor II (Good)	26.16	4.55		49***	39***	-36***	24***	68***
3. Factor III (Power)	22.88	3.42			44***	-16***	17***	65***
4. Factor IV (Expression)	15.59	4.55				00	14***	72***
5. Factor V (Evil)	9.67	4.17					-02	09*
6. Factor VI (Management)	19.27	4.25						47***
7. The Money Scale	119.15	16.11						

Note. N = 688. All decimals have been omitted for correlations. *p < .05, **p < .01, ***p < .001.

Table 3

Mean, Standard Deviation, and Correlations of Work-Related Variables and The Money Ethic Scale

Variable	M	SD	Factor I	II	III	IV	V	VI	Money
Age	28.14	10.25	-04	07	03	01	-19***	14***	00
Sex (Female=0, Male=1)			13***	12***	09*	05	-01	03	12***
Height	67.78	4.06	09**	05	03	03	03	03	08*
Weight	150.55	33.01	07*	08*	04	01	01	06	08*
Years of Education	15.16	2.01	03	-02	-05	00	-11***	-02	-04
Income (1,000)	16.51	13.38	00	04	-04	-10*	-18***	-06	-09*
Tenure (Month)	47.22	69.55	-03	03	-00	04	-01	07	03
Work Ethic	86.44	11.73	06	05	13***	13***	22***	21***	21***
Leisure Ethic	47.71	7.54	22***	24***	20***	10**	-10**	-09**	18***
Type A	44.45	8.27	10**	13***	08*	05	-04	37***	20***
I-E	9.83	4.16	06	06	12***	12***	06	-09**	09**
Social Approval	15.51	5.23	-10**	-16***	-12***	-10**	08*	18***	-07*
Study of Values Theoretical	39.24	7.53	17***	07*	10**	06	-04	05	13***
Economic	43.20	7.50	30***	24***	06*	11**	-10**	11**	24***
Aesthetic	37.92	7.91	-09*	-10**	-05	-02	-08*	-13***	-13***
Social	38.48	7.30	-20***	-12***	-06	-12***	13***	-05	-14***
Political	40.38	6.95	29***	16***	08*	11**	-13***	05	18***
Religious	40.81	9.95	-30***	-20***	-10**	-15***	17***	-01	-19***

(Continues)

Table 3

Variable	M	SD	Factor I	II	III	IV	V	VI	Money
Job Satisfaction (JDI)									
Work	32.58	11.59	-19***	06	-04	-09*	-15**	01	-13***
Pay	30.67	14.55	-12**	-04	-12**	-12**	01	-03	-13**
Promotion	24.62	18.23	-01	03	-05	04	-01	11*	03
Supervision	40.62	13.30	-03	11*	03	-01	-12**	12**	02
Co-Workers	41.17	12.73	-16***	03	-02	-09*	-11*	-01	-12**
Life Satisfaction									
Material	4.86	1.47	-06	02	-07*	-04	-03	09**	-02
Health	5.23	1.47	-04	10	00	03	-08*	13***	03
Relative	5.38	1.49	-09*	03	-06	-05	03	08*	-02
Children	2.81	3.03	-03	02	02	-00	-04	14***	02
Spouse	4.92	2.35	02	07*	-02	-02	-08*	12***	03
Friends	5.60	1.29	-04	04	-01	-08*	07*	04	-00
Helping Others	5.15	1.46	-08*	-05	-01	03	11**	06	-00
Government	3.32	2.08	03	06	-03	07*	-03	07*	05
Learning	5.52	1.32	00	04	09**	08*	00	17***	10**
Understanding	5.48	1.24	-12***	01	-00	-08*	-04	26***	-01
Work	4.96	1.92	-04	03	-01	02	-00	15***	03
Expressing	4.88	1.58	-09**	06	01	-02	-04	13***	00
Socializing	4.91	1.46	-07*	09**	00	-04	00	09**	01
Reading	5.59	1.20	-04	08*	06	-01	-04	12***	04
Active Recreation	5.24	1.37	-03	08*	04	05	03	10**	07*
Life Satisfaction	5.48	1.09	-19***	-02	-11***	-08*	-01	17***	-09*

(Continues)

Table 3

Variable	M	SD	Factor I	II	III	IV	V	VI	Money
Depression	9.93	2.74	15***	05	08*	12***	06	-09**	11***
Anxiety	6.75	2.15	10**	03	07*	10**	10**	-04	11**
Irritation	5.62	1.58	12***	10**	05	06	02	-03	09**

Note. N = 688. For JDI, n = 392. *p < .05, **p < .01, ***p < .001.

Table 4

The Means of the Money Ethic Scale and Its Factors By Occupations

Occupation	n	Money	I	II	III	IV	V	VI
Social Service	6	103.83	17.50[c]	23.00	21.17	12.83	11.83	17.50
Minister/Religious	16	109.63[a]	20.44[c]	24.88	21.63	15.25	9.69	17.75
School Teacher	22	111.14[a]	23.18	25.68	21.27	14.23	8.09[e]	18.68
Information/Data	7	115.00	24.29	25.00	22.29	14.86	9.57	19.00
Supervisor	22	116.41	25.27	26.32	22.77	14.64	8.45	18.95
Personnel Manager	33	116.48	26.15	26.00	21.94	13.91	9.39	19.09
Engineer	33	117.67	25.30	26.39	22.79	14.76	9.03	19.39
Student	56	118.34	25.32	25.98	23.45	15.36	9.46	18.77
Food Service	37	118.51	24.76	23.92	22.41	15.93	12.32[f]	19.38
Secretary/Clerk	44	119.27	25.82	26.52	23.09	15.18	9.09	19.57
Cashier/Sales Clerk	32	119.63	25.25	26.78	23.22	15.41	10.53	18.44
Computer Programmer	8	120.25	24.13	25.25	22.88	17.38	10.00	20.63
Home Maker	7	120.43	23.14	25.71	23.57	19.00	9.86	19.14
Sales	22	120.50	27.14	25.68	22.77	15.69	10.32	19.00
Health Care Worker	13	121.00	25.23	26.00	24.62	16.08	9.15	19.92
Technician	19	121.05	27.05	25.21	22.47	16.05	9.32	20.95
Financial	17	122.47	26.65	27.35	24.18	16.41	8.41	19.47
Manager/Owner	39	122.64	26.67	26.87	23.10	16.72	9.38	19.90
Professor	11	124.18	25.91	28.55	24.55	16.00	8.64	20.55
Military/Police	14	124.50	27.79	25.71	22.71	16.79	10.86	20.64
Production Worker	33	127.39[b]	28.55[d]	26.94	23.97	17.27	10.67	20.00
Miscellaneous	12	130.50	29.50[d]	29.08	25.42	17.33	8.25	20.92

Note. For each column, occupations not sharing a common superscript are significantly diff ($p < .05$) according to the Tukey-HSD procedure.